WHAT IS CLAIMED IS:

1.   1.   A computer implemented method for provisioning Broadband service in a
2   Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:
3   establishing a Plain Old Telephone System (POTS) connection between
4   a Broadband modem and a remote server;
5   receiving from said remote server via said POTS connection using
6   Dual-Tone Multi-Frequency (DTMF) tones, a domain name associated with a
7   Broadband Service Node (BSN); and
8   establishing a PPPoE session using said domain name.

1   2.   The method of claim 1, wherein said establishing step comprises authenticating
2   said Broadband modem for said PPPoE session.

1   3.   The method of claim 1, wherein said establishing step comprises:
2   transmitting a request for configuration details from said Broadband
3   modem to said BSN having said domain name, where said request is
4   transmitted over a PPPoE network; and
5   receiving configuration details from said configuration server.

1   4.   The method of claim 1, further comprising, prior to said receiving step, the step
2   of transmitting a configuration request from said Broadband modem to said
3   remote server using DTMF tones.

1   5.   The method of claim 1, wherein said receiving comprises further acquiring from
2   said remote server via said POTS connection using DTMF tones, a user
3   identifier.

1   6.   The method of claim 5, wherein said establishing comprises transmitting said
2   user identifier as a username to establish said PPPoE session.

1   7.   The method of claim 5, wherein said user identifier is a telephone number of

2   associated with a twisted pair through which said Broadband modem

3   established said POTS connection.

1   8.   The method of claim 5, wherein said transmitting further comprises sending

2   said request, where said request contains said user identifier.

1   9.   The method of claim 1, wherein said receiving step comprises acquiring

2   configuration details unique to said Broadband modem.

1   10.   The method of claim 1, further comprising automatically configuring said

2   Broadband modem with said configuration details.

1   11.   The method of claim 1, wherein said configuration details include a dynamic

2   Internet Protocol (IP) address.

1   12.   The method of claim 1, further comprising:

2   transmitting a request for full configuration details to a configuration

3   server over said PPPoE network, where said request for full configuration

4   details contains a user identifier;

5   receiving full configuration details from said configuration server; and

6   automatically configuring said Broadband modem with said full

7   configuration details.

1   13.   The method of claim 12, wherein said full configuration details include a static

2   IP address.

1   14.   The method of claim 1, further comprising, prior to said establishing step, the

2   step of detecting a POTS dial-tone.

1   15.   A computer implemented method for provisioning Broadband service in a

2   Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:

3   establishing a Plain Old Telephone System (POTS) connection between

4   a Broadband modem and a remote server;

5   receiving from said remote server via said POTS connection using

6   Dual-Tone Multi-Frequency (DTMF) tones, a domain name associated with a

7   Broadband Service Node (BSN);

8   transmitting a request for configuration details from said Broadband

9   modem to said BSN having said domain name, where said request is

10   transmitted over a PPPoE network;

11   receiving configuration details from said configuration server;

12   configuring said Broadband modem using at least part of said

13   configuration details; and

14   transmitting at least part of said configuration details to a client

15   computer coupled to said Broadband modem to enable said client computer to

16   configure itself.

1   16.   A computer implemented method for provisioning Broadband service in a

2   Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:

3   answering at a remote server a Plain Old Telephone System (POTS)

4   call placed from a Broadband modem to said remote server;

5   determining a telephone number from which said POTS call was placed

6   by said Broadband modem;

7   looking-up a domain name of a Broadband Service Node (BSN)

8   associated with said telephone number;

9   transmitting said domain name and said telephone number to said

10   Broadband modem using Dual-Tone Multi-Frequency (DTMF) tones.

1   17.   The method of claim 16, wherein said determining step uses Automatic

2   Number Identification (ANI) to determine said telephone number.

1 18. The method of claim 16, further comprising, prior to said determining step, the

2   step of receiving a configuration request from said Broadband modem, where

3   said request is transmitted using DTMF tones.

1 19. A system for provisioning broadband service in a Point-to-Point Protocol Over

2   Ethernet (PPPoE) network, comprising:

3   a least one client computer;

4   a remote server coupled to a Public Switched Telephone Network

5   (PSTN) and configured to communicate using DTMF tones;

6   a Broadband modem coupled to said client computer and said PSTN,

7   said Broadband modem including a memory comprising:

8   instructions for establishing a Plain Old Telephone System

9   (POTS) connection over said PSTN between said Broadband

10   modem and said remote server;

11   instructions for receiving from said remote server via said

12   POTS connection using Dual-Tone Multi-Frequency (DTMF)

13   tones, a domain name associated with a Broadband Service

14   Node (BSN);

15   instructions for transmitting a request for configuration

16   details from said Broadband modem to said BSN having said

17   domain name, where said request is transmitted over a PPPoE

18   network; and

19   instructions for receiving configuration details from said

20   configuration server.

1 20. The system of claim 19, further comprising:

2   a Digital Subscriber Line Access Multiplexor (DSLAM) coupled between

3   said Broadband modem and said BSN;

4   an Asynchronous Transfer Mode (ATM) network coupled between said

5   DSLAM and said BSN; and

6   a Broadband Remote Access Server (BRAS) coupled between said

7   ATM network and said single configuration BSN.

1   21.   The system of claim 19, further comprising:

2   multiple Broadband Service Nodes (BSNs) coupled to said modem,

3   where each of said BSNs is associated with a different domain name; and

4   an authentication server coupled to each one of said multiple BSNs.

1   22.   The system of claim 21, wherein said multiple BSNs are coupled to the

2   Internet.

1   23.   The system of claim 19, further comprising a POTS switch coupled between

2   said Broadband modem and said PSTN.

1   24.   A computer program product for use in conjunction with a computer system for

2   provisioning broadband service in a Point-to-Point Protocol Over Ethernet

3   (PPPoE) network, the computer program product comprising a computer

4   readable storage and a computer program stored therein, the computer

5   program comprising:

6   instructions for establishing a Plain Old Telephone System

7   (POTS) connection between a Broadband modem and a remote server;

8   instructions for receiving from said remote server via said POTS

9   connection using Dual-Tone Multi-Frequency (DTMF) tones, a domain

10   name associated with a Broadband Service Node (BSN);

11   instructions for transmitting a request for configuration details

12   from said Broadband modem to said BSN having said domain name,

13   where said request is transmitted over a PPPoE network; and

14   instructions for receiving configuration details from said

15   configuration server.